

Chemical Engineering at



Tennessee TECH

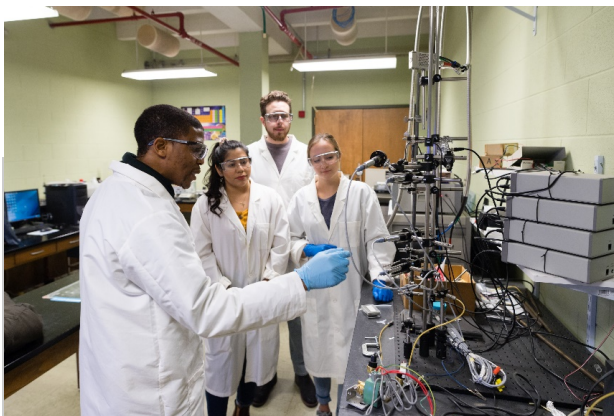
Faculty

- **Holly Stretz**, *Professor and Interim Chair* (Ph.D., University of Texas, Austin, 2005): Nano-Composite Structures and Modeling; High-Temperature Materials and Ablatives; Polymer Processing
- **Pedro E. Arce**, *Professor* (Ph.D., Purdue University, 1990): Electrokinetics (Nano/Micro Flows in Biophysical Applications), Nano-Structured Soft Material for Electrophoresis (Environmental Proteomics, Clinical Diagnostics; Drug Delivery); Environmental Catalysis (Water Purification/ Recycling, Energy-Water Nexus, Porous Electrodes); Engineering Education
- **Laura H. Arias-Chavez**, *Assistant Professor* (Ph.D., Yale University, 2014): Polymeric Membrane: Fabrication and Characterization; Drinking Water Treatment; Sustainable Energy Production; Nanofibers via Electro-Spinning
- **Joseph J. Biernacki**, *Professor* (DRE, Cleveland State University, 1988): Cementitious Materials (Hydration Kinetics, Material Structure); Green Chemistry-Based Biofuels; Multi-Scale Materials (Modeling and Properties); Engineering Education
- **Bahman Ghorashi**, *Professor* (Ph.D., Ohio State University, 1980): Fluid Mechanics; Combustion; Agile Manufacturing; Management of Technology
- **Cynthia Rice**, *Associate Professor* (Ph.D., University of Illinois, Urbana-Champaign, 2000): Fuel Cells; Electrocatalysis; Electrochemical Analysis; Research Methods in Undergraduate Education
- **J. Robert Sanders**, *Associate Professor* (Ph.D., Vanderbilt University, 2001): Biomolecular Medicine; Micro-Fluidics in Clinical Diagnostics; Drug Delivery and Gene Therapy; Engineering Education
- **Liqun Zhang**, *Assistant Professor* (Ph.D., University of Rhode Island, 2007): Molecular Dynamics Simulations; Material Structure and Performance; and Protein Dynamics and Function

Students with backgrounds in engineering or related disciplines can pursue their graduate education within the interdisciplinary Engineering Ph.D. program, with which the Department of Chemical Engineering closely partners, providing opportunities to

- Collaborate with award-winning faculty across disciplines in cutting-edge research projects in *Advanced Materials*, *Electrical-Based Systems*, and *Biological-Based Systems*, and also molecular and applied and computational mathematics.
- Present research at national society annual meetings and others where students often receive awards for their outstanding contributions.
- Enhance their expertise in *Engineering Education* through exciting avenues to *develop methodologies* supporting the *National Academy of Engineering's Vision for the Engineer of 2020 Model*.
- Potentially earn prestigious NSF and NIH postdoctoral fellowships and leading research positions in premiere national and international companies.

**Competitive graduate
assistantships
and fellowships
are available.**



FOR MORE INFORMATION, contact:

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